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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,845	04/15/2004	Michael Tidwell	OT2.P17-4	6863

7590 09/07/2004  
Steven P. Koda, Esq.  
KODA LAW OFFICE  
8070 E Mill Plain Blvd, No. 141  
Vancouver, WA 98664

EXAMINER
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OSORIO, RICARDO

ART UNIT	PAPER NUMBER
2673	

DATE MAILED: 09/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/824,845

**Applicant(s)**

TIDWELL ET AL.

**Examiner**

RICARDO L OSORIO

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 1-13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \*   c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Specification*

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

In claim 1, lines 8-9, it reads “a signal source responsive to the background light which varies a wavefront curvature of the image to correlate a focal distance to the background light”. There is no antecedent basis for this limitation in the specification.

In claim 5, lines 5-8, it reads “a control signal which adjusts the lensing system to achieve a first wavefront curvature of the exiting light during a first portion of a field of view and to achieve a second wavefront curvature during a second portion of the field of view”. There is no antecedent basis for this limitation in the specification.

In claim 9, lines 9-11, it reads “the controller generating a signal to vary wavefront curvature of the exiting light based upon the tracked eye position”. There is no antecedent basis for this limitation in the specification.

In claim 12, lines 7-9, it reads “a signal source which varies wavefront curvature of the exiting light to position a first virtual object at a first apparent distance and to position a second virtual object at a second apparent distance”. There is no antecedent basis for this limitation in the specification.

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In claim 13, lines 6-10, it reads “a signal source responsive to detected depth which varies wavefront curvature of the image light for the first virtual object to correlate the first apparent distance to a first detected depth of the background light and which varies the wavefront curvature of the image light for the second virtual object to correlate the second apparent distance to a second detected depth of the background light”. There is no antecedent basis for this limitation in the specification.

***Allowable Subject Matter***

2. Claims 1-13 would be allowable once the lack of antecedent basis in the specification problem is corrected. The following is a statement of reasons for the indication of allowable subject matter: Claims 1-13 are allowable since certain key features of the claimed invention are not taught or fairly suggested by the prior art. In claim 1, a signal source responsive to the background light which varies a wavefront curvature of the image to correlate a focal distance to the background light. In claim 5, a control signal which adjusts the lensing system to achieve a first wavefront curvature of the exiting light during a first portion of a field of view and to achieve a second wavefront curvature during a second portion of the field of view. In claim 9, a controller generating a signal to vary wavefront curvature of the exiting light based upon the tracked eye position. In claim 12, a signal source which varies wavefront curvature of the exiting light to position a first virtual object at a first apparent distance and to position a second virtual object at a second apparent distance. In claim 13, a signal source responsive to detected depth which varies wavefront curvature of the image light for the first virtual object to correlate the first apparent distance to a first detected depth of the background light and which varies the

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wavefront curvature of the image light for the second virtual object to correlate the second apparent distance to a second detected depth of the background light. The closest prior art, Kollin et al. (5,701,132) discloses a scanning display apparatus, however, either singularly or in combination, fails to anticipate or render the above underlined limitations obvious.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricardo L. Osorio whose telephone number is 703 305-2248. The examiner can normally be reached on Monday through Thursday from 7:00 A.M. to 5:30 P.M. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala whose telephone number is 703 305-4938.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

703 872-9306 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

**Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have**

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**questions on access to the Private PAIR system, contact the Electronic Business Center  
(EBC) at 866-217-9197 (toll-free).**

A handwritten signature in black ink, appearing to read "Ricardo L. Osorio", written over a horizontal line.

Ricardo L. Osorio

Examiner

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RLO

September 2, 2004